

Chapter 12 – (Re)Thinking HACCP

With the previous sections in mind, a manager or supervisor now has a basic knowledge of food safety and sanitation. ***Putting this knowledge into practice in a food establishment operation is an activity of foodborne disease prevention.*** Food operations are expected to establish "Active Managerial Controls" in order to help prevent a foodborne disease. One way to implement Active Managerial Controls is to develop and use a HACCP (pronounced has-sip) plan. The acronym HACCP means "Hazard Analysis and Critical Control Points".

A HACCP plan involves identifying hazards (chemical, biological, or physical) at specific points during food handling in a food establishment and identifying how the hazards can be prevented, eliminated, or reduced to a safe level.

In the late 1960's, the Pillsbury Company started HACCP to meet NASA and US Army standards for reduced levels of pathogens in food. ***Today, HACCP is recognized as the most effective process of preventing foodborne disease.***

HACCP PROMOTED AND "ACTIVE MANAGERIAL CONTROLS"

Although the *Idaho Food Code* does not require all food establishments to use HACCP, it is recommended that all food establishments use this innovative approach to food safety in some form. Because of interest in the subject, HACCP information is included in this manual.

It should be noted that a fully developed HACCP plan, such as the kind that food processors are expected to maintain, can be very involved and complex. There are individuals

who can help a food processing company develop and maintain these plans. However, HACCP for a food establishment such as restaurant, grocery store, or convenience store, can take a very different shape and still meet the intent of having a plan.

HACCP Based Inspections

The inspection process for food establishments is changing to focus more on the actual risks that are associated with foodborne illness. This is not to suggest that your inspector will ignore the grease on the walls if you fail to clean regularly; however, that inspector will focus more of his or her time on monitoring temperatures, sanitization levels, cleanliness of food contact equipment, and hygienic practices of employees. These are all part of the inspector's own Active Managerial Controls. In addition, these types of observations are based on HACCP principles. With this in mind, the rest of this chapter will offer suggestions and recommendations for developing your own Active Managerial Controls and HACCP principles.

HACCP PRINCIPLES AND CRITICAL LIMITS

Developing Active Managerial Controls requires that we first know some definitions that are associated with HACCP.

Critical Control Point (CCP). A CCP is a point along the path of food flow that if not controlled might result in the food becoming unsafe to eat. For example, there are five easily identifiable critical control points in most food establishments: cooking temperatures, cooling times, holding temperatures, re-heating temperatures, and personal hygiene practices.

Critical limits. A critical limit is the measurable aspect of the CCP. For example, the critical limit for the cooking temperature of a hamburger patty is 155°F. for 15 seconds.

Corrective Action. A corrective action is what can be done if the critical limit is not met. For example, if the hamburger patty is measured to be only 135°F., the corrective action could be to continue cooking it.

Now that we have some definitions, there are three important HACCP principles to know in order to develop Active Managerial Controls:

- Identify and know what aspects of your establishment need critical limits.
- Identify what those critical limits are.
- Identify what corrective actions can be taken if a critical limit is not met.

Each of these principles might be different for each establishment, but the following scenarios provide some examples.

1. A deli makes freshly prepared fruit salad each morning. The fruit is cleaned, cut and mixed with the other ingredients of the salad. The salad is then held in the cold display case, and it is served by request. In this case, the critical limits include the holding temperature of the food and the personal hygienic practices of the person assigned to make the salad. The manager identifies that the following critical limits must be met: Salad held at or below 41°F and no bare hand contact with the salad ingredients. The manager also instructs staff members that if these critical limits are not met, the salad should be discarded.
2. A drive-in restaurant offers a large selection of specialty hamburgers. The burgers are made from frozen patties, and the burgers are each cooked fresh at the time of order. In this case, the most likely critical limit would be that the hamburger patties are cooked to a minimum internal temperature of 155°F. If this critical limit is not met, the meat should be set back on the grill until it is fully cooked.

3. A full service Italian restaurant makes its own lasagna. Part of the recipe calls for the meat sauce to be cooled and then added to the rest of the lasagna the next day. The lasagna is then reheated prior to being served to the customer. In this case, there might be several critical limits, but two that clearly stand out are the cooling times of the sauce and the reheating temperature of the lasagna. *Idaho Food Code* rules require that foods be cooled from 140°F to 70°F within 2 hours and 70°F to 41°F or less in 4 hours. This two-step cooling process helps to control spore forming bacteria. *Idaho Food Code* rules also require that food reheated prior to service must reach a minimum internal temperature of 165°F. This is in order to destroy any harmful bacteria that might have been introduced into the food at any point along the process. Corrective steps if these limits are not met could include cooling the sauce more rapidly with the use of ice wands and shallow pans and continuing to reheat the lasagna to make sure that the proper temperature is met.

DOCUMENTATION OF HACCP PRINCIPLES

Now that your establishment can identify some of the critical limits and steps to take to correct critical limits, the next thing to do is to implement some type of procedure to check that these Active Managerial Controls are being met. The most effective way to do this is to establish a program of documenting what is taking place.

You might consider making a written **checklist** type of sheet that allows you and your staff to record the critical limits such as temperatures. For

example, with scenario number 3 above, the restaurant should develop a written sheet so that the staff member assigned to cool the meat sauce can record the temperature of the sauce every 30 minutes. In this way, the staff member will know if the sauce is cooling quickly enough, and if not, he or she can also document what was done to have the sauce cool within the appropriate time frames. This will also help the person in charge the next day to make sure that the sauce was cooled properly and is safe to use in preparing the rest of the lasagna. Written records such as these should be maintained in your establishment for several weeks. This will help you to be able to track the food items and know what processes were taking place a week ago or three weeks ago.

These types of documentation sheets could also reflect any corrective actions that were taken. Using the example of establishment #2 above, if a staff member were cooking the hamburger patties and he or she was checking the temperature of them, they could record on the sheet what that cooked temperature was. If they checked the temperature and found that the critical limit (155°F) was not met, they could place the meat back on the grill and record on the sheet that the meat was not fully cooked and returned to the grill. The next day, the manager of the restaurant could review these sheets and know that the hamburgers served were cooked to the proper temperatures and that staff members knew what to do in case the proper temperature was not met.

Implementing these Active Managerial Controls also requires that the manager or owner of the food establishment provide for the staff the necessary items. Using the example of the deli in #1, if a manager identifies that proper hygiene is a critical limit for the fruit salad, he or she needs to provide the ability for the staff members to properly wash their hands, as well as provide equipment so that the staff members don't have to use their bare hands when preparing the salad. This might mean

providing gloves, tongs or other utensils, as well as making sure that the handwashing sink is properly stocked and regularly used.

If cooking temperatures are the identified critical limits, a manager should provide accurate thermometers to the staff members. If cooling procedures are identified as the critical limits, the manager should provide enough shallow pans and enough space in the walk in cooler to make sure that the cooling times will be met. He or she also might consider purchasing ice wands from the distributor and providing staff members with instructions about how to use these tools to help cool foods.

HACCP PRINCIPLES AND PLANS

By implementing these types of principles and Active Managerial Controls, you are well on the way to actually implementing a HACCP plan. For any assistance with developing these types of Active Managerial Controls, please contact your local District Health Department or other individuals who can assist with this process.

HACCP principles and Active Managerial Controls are some simple, yet very effective ways to make sure that the food you are providing your customers is safe and of the highest quality.

Summary

- HACCP stands for Hazard Analysis of Critical Control Points
- HACCP can be a very effective tool for providing safe food
- HACCP requires you to identify critical control points (ccp's) and monitor how these ccp's are met